Recombinant DLP1 protein (His tag)

Catalog Number	545358
Synonyms	All-trans-decaprenyl-diphosphate synthase subunit 2; Candidate tumor suppressor protein; Decaprenyl pyrophosphate synthase subunit 2; Decaprenyl-diphosphate synthase subunit 2; Solanesyl-diphosphate synthase subunit 2
Species	Human
Expression System	E. coli
Accession	Q86YH6
Molecular Weight	Predictes a molecular mass of 40.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	48-399
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 48-399 aa (Q86YH6) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant PDSS2 protein fragment (amino acids 48-399), derived from the human All trans-polyprenyl-diphosphate synthase PDSS2. This fragment is a stable, soluble unit ideal for investigating the enzyme's role in ubiquinone biosynthesis and mitochondrial function, supporting structural and biochemical studies. The full-length PDSS2 protein is a heterotetrameric enzyme that catalyzes the condensation of farnesyl diphosphate (FPP) and isopentenyl diphosphate (IPP) to produce prenyl diphosphates, such as nona and decaprenyl diphosphate, which are precursors for the side chains of ubiquinone-9 (Q9) and ubiquinone-10 (Q10). This process is essential for the synthesis of isoprenoid quinones, contributing to mitochondrial respiratory chain function and energy production. PDSS2 is localized to the mitochondrion and may also play roles in cerebellar development and as a candidate tumor suppressor. The provided fragment encompasses a stable region of the protein, enabling focused research on its catalytic and regulatory mechanisms.